

ABSTRACT OF THE DISCLOSURE

A system, device, and method for establishing label switched paths across multiple autonomous systems involves establishing a label switched path in each autonomous system, and, at each shared border device, linking an incoming label switched path in an incoming autonomous system to an outgoing label switched path in an outgoing autonomous system. The Label Distribution Protocol is preferably used to establish the label switched path between border devices in each autonomous system. Each border device maps a label associated with the incoming label switched path to a label associated with the outgoing label switched path. When a border device receives a protocol message including the label associated with the incoming label switched device, the border device replaces the label in the protocol message with the label associated with the outgoing label switched path, and forwards the protocol message to the downstream neighboring (next hop) device in the outgoing autonomous system.